AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph on page 5 beginning at line 6 and ending at line 12 with the following paragraph:

According to the apparatus for controlling a DC brushless motor of the present invention, the high-frequency voltages are set so that the direction of a revolving magnetic field generated when the high-frequency voltages are applied to the armatures of the motor and the direction in which the motor is rotated by the drive voltages are opposite to each other.

Please add the following new paragraphs after the first paragraph on page 6.

According to the method of detecting a rotor angle of a DC brushless motor of the present invention, there is provided a method of detecting the rotor angle of the DC brushless motor controlled by an apparatus, said apparatus comprising voltage applying means for applying drive voltages to the armatures, first current detecting means for detecting a current flowing through an armature in a first phase of the armatures in the three phases, second current detecting means for detecting a current flowing through an armature in a second phase of the armatures in the three phases, three-phase/dq converting means for handling the motor as an equivalent circuit having a q-axis armature disposed on a q-axis in the direction of magnetic fluxes from a rotor of the motor and a d-axis armature disposed on a d-axis which is perpendicular to the q-axis, and calculating a detected q-axis current flowing through the q-axis armature and a detected d-axis current flowing through the d-axis armature based on the rotor angle of the motor which is calculated by the rotor angle calculating means, the first current value, and the second current value, and current control means for determining the drive voltages so that a q-axis reference current produced by passing the detected

q-axis current through a low-pass filter and a d-axis reference current produced by passing the detected d-axis current through a low-pass filter will be equalized to a predetermined q-axis command current and a predetermined d-axis command current, respectively.

The method is characterized by comprising the step of adding the high-frequency voltages, which are set so that the direction of a revolving magnetic field generated when said high-frequency voltages are applied to the armatures of said motor and the direction in which said motor is rotated by said drive voltages are opposite to each other, to said drive voltage, calculating a sine reference value depending on the sine value of a twofold angle which is twice a rotor angle of said motor and a cosine reference value depending on the cosine value of the twofold angle, using a first current value detected by said first current detecting means and a second current value detected by said second current detecting means when said high-frequency voltages are added to said drive voltages, and high-frequency components depending on said high-frequency voltages; and a step of calculating a rotor angle of said motor using said sine reference value and said cosine reference value.

With the above arrangement, the ability of the low-pass filters to attenuate the high-frequency currents added to the detected q-axis current and the detected d-axis current is increased, reducing the difference between the q-axis reference current and the q-axis command current and the difference between the d-axis reference current and the d-axis command current due to the high-frequency currents. Therefore, the ability of the motor to cause its output torque to follow the d-axis command current and the q-axis command current is increased, and thus the rotor angle of the motor can be detected.